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09/722,299	11/28/2000	Francois Panzani	Q61924	5765
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EXAMINER				
NGUYEN, HUYNH				
ART UNIT		PAPER NUMBER		
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06/30/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/722,299

Applicant(s)

PANZANI ET AL.

Examiner

HUY D. NGUYEN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- 7) ☐ Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

1. In view of the arguments filed on 4/7/2008, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/DWAYNE D. BOST/  
Supervisory Patent Examiner,  
Art Unit 2617

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8-9 contradict with claim 1 in that claims 8-9 recite "second group and third group have different resources" whereas claim 1 recites "each group has all the resource of the region".

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4, 6, 8-9, 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Patterson et al. (US Patent No. 5,736,959).

Regarding claim 1, Patterson et al. teaches a transmit-receive system on board a satellite for a telecommunication system within a region covered by said system, wherein said region includes a plurality of areas (e.g., areas around mobile phones with radius, say, 1 m) including isolated areas, said system receives calls from any area and transmits said calls to the same area or another area (inherent), said system comprising: means for combining signals from said plurality of areas into groups (i.e., means for combining signals from mobile phones in earth-fixed cells) and routing means for routing calls from any one of said groups to itself, or to another of said groups (inherent), wherein each group (i.e., earth-fixed cell) is allocated all of the communication resources of said region (e.g., The Earth-fixed cell technique offers enormous spectral efficiency, since 100% of the frequencies between the cells and between the satellites 12 are constantly reused, see col. 28, lines 52-55).

Regarding claim 4, Patterson et al. teaches the system claimed in claim 1 further comprising switching means for modifying the composition of said groups so that at least one area can be transferred from one group to another (e.g., a subscriber being served by one satellite must switch to another beam in the same satellite or to a second satellite because the first is moving out of range below the local horizon).

Regarding claim 6, Patterson et al. teaches the system claimed in claim 5 wherein said means for grouping said signals of several areas use a beam-forming network (see fig. 2 and col. 6, lines 9-17).

Regarding claim 10, Patterson et al. teaches the system claimed in claim 9 wherein said resources further include polarizations (see col.11, lines 55-57).

Regarding claim 11, Patterson et al. teaches the system claimed in claim 1 wherein at least some of said areas corresponding to the same group are geographically far apart (in a cell, there're areas far apart from each other).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 5, 7, 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson et al..

Regarding claim 2, the examiner takes official notice that hardwired has been known in the art. It would have been obvious to have had the routing means hardwired to avoid RF interference.

Regarding claim 5, it would have been obvious to have had the combiner as part of an antenna system since it has been held that forming in one piece an article which has formerly been formed in two piece and put together involves only routine skill in the art. *In re Stevens*,, 101 USPQ 284 (CCPA 1954).

Regarding claim 7, it would have been obvious to have had grouping means as part of repeater means since it has been held that forming in one piece an article which has formerly been formed in two piece and put together involves only routine skill in the art. *In re Stevens*,, 101 USPQ 284 (CCPA 1954).

Regarding claims 12-13, it would have been a matter of choice to have a certain number of areas in a cell since the invention would perform equally well.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson et al. in view of Chao (US Patent No. 6,215,776).

Regarding claim 3, Patterson et al. does not teach that the areas are allocated to said groups in such a manner that the traffic is substantially the same from one group to another. The preceding limitation is taught in Chao (see col. 9, lines 18-27). It would have been obvious to have implement the system of Patterson et al. with the teaching of Chao to use the resource efficiently.

***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY D. NGUYEN whose telephone number is (571)272-7845. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huy D Nguyen/  
Examiner, Art Unit 2617